

# **MLIT's Initiative for Promoting Blue Carbon Policy**

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October 02 2024

# Agenda

- Promotion of the use of Blue Carbon
- J-Blue Credit

# Promotion of the use of Blue Carbon

- The Ministry of Land, Infrastructure, Transport and Tourism (MLIT) in Japan defined Blue Carbon Ecosystem and Biosymbiotic port infrastructure as “Blue Infrastructure”.
- We are promoting “Blue Infrastructure” for nationwide to achieve carbon neutrality by increasing CO<sub>2</sub> sink through conservating Blue Carbon Ecosystems\* and rich-biodiverse ocean.

\* Blue Carbon Ecosystems: sea grass, seaweed, tidal flats and mangrove forests

## Blue Infrastructure



【Seagrass bed】



【Seaweed bed】



【Tidal flat】



【Biosymbiotic port infrastructure】

## 【Main actions】

### ①Promotion of leading Blue Carbon initiatives

- Establishment of organizations and matching system for involving various supporters



### ②Study on simple methods for calculating the greenhouse gas sequestration

- Developing drones to monitor the growth of seagrass beds etc.



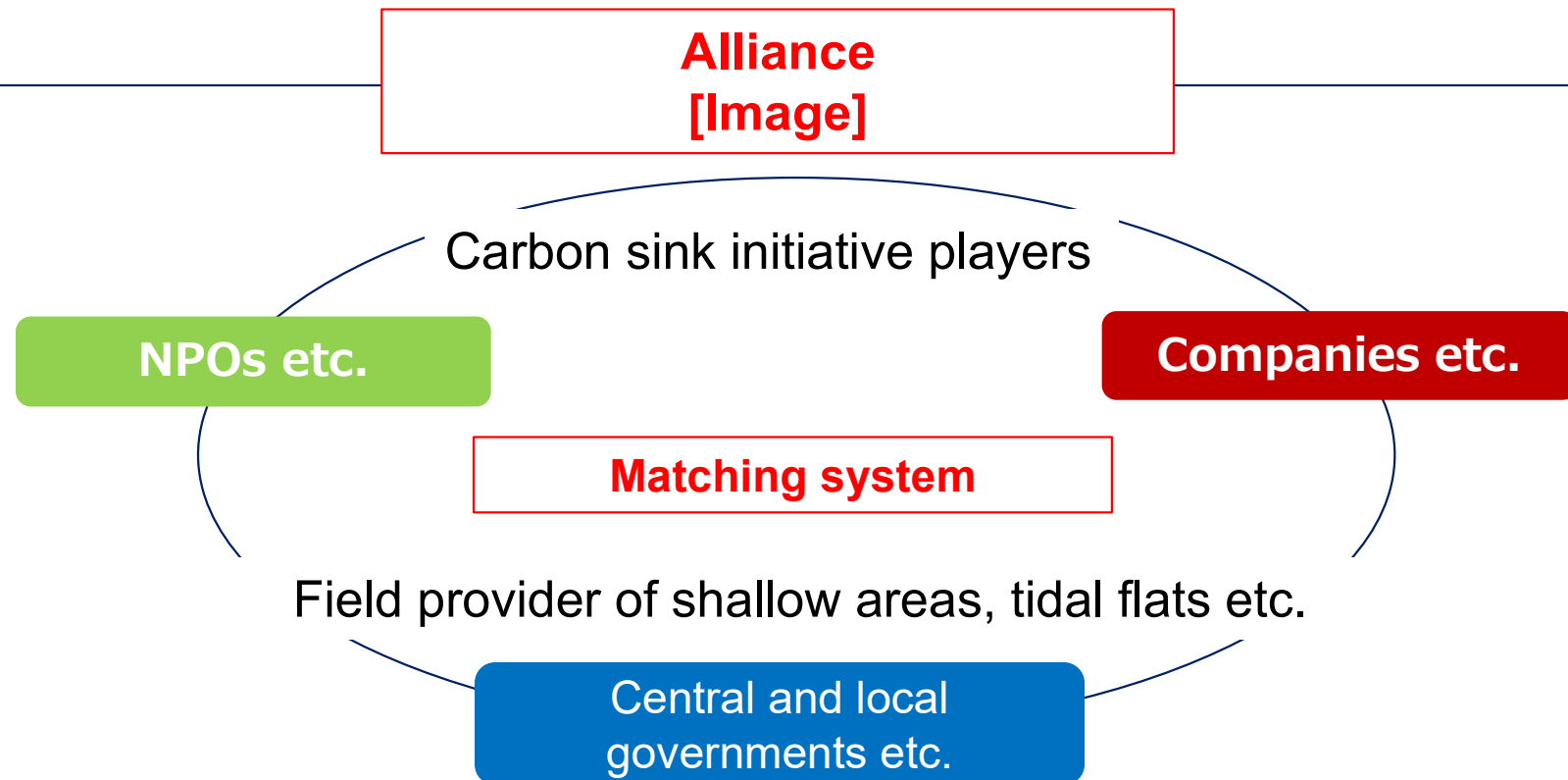
### ③Enhancement of environmental protection in the design and construction of port facilities.

- Study to standardize on biosymbiotic structures.



# ① Establishment of organizations and matching system

- It is necessary to involve supporters who have know-how for farming seaweed beds and tidal flats, and to provide stable funding for these activities in order to expand efforts to conserve, restore and create seaweed beds and tidal flats.
- MLIT is planning to establish an alliance with the aim of creating opportunities for matching among NPOs, companies, central and local governments.
- In order to further promote matching, MLIT is planning to establish a matching system where NPOs, companies, local governments, etc. that are members of the alliance can review information on their respective initiatives and the knowledge and resources they can provide.

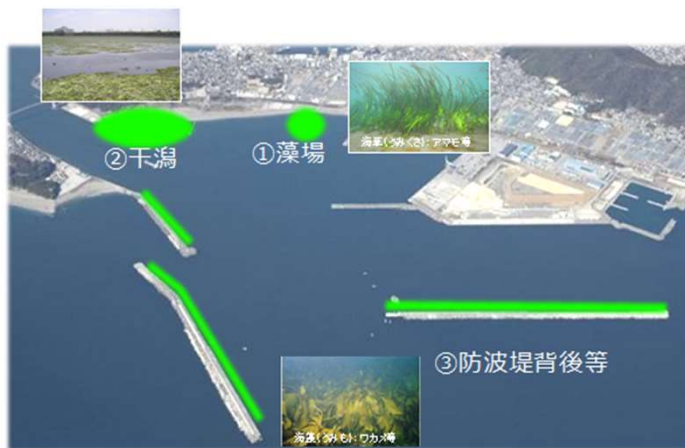


## ②Development of Blue Carbon High Precision Data System

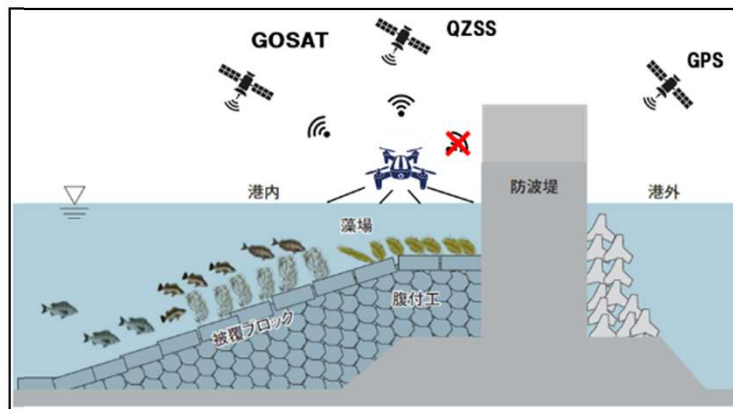
- MLIT is currently developing a system to accurately and efficiently survey and manage the growth area of seaweed beds to calculate greenhouse gas emissions and sequestration amounts etc.

### Detail of the system

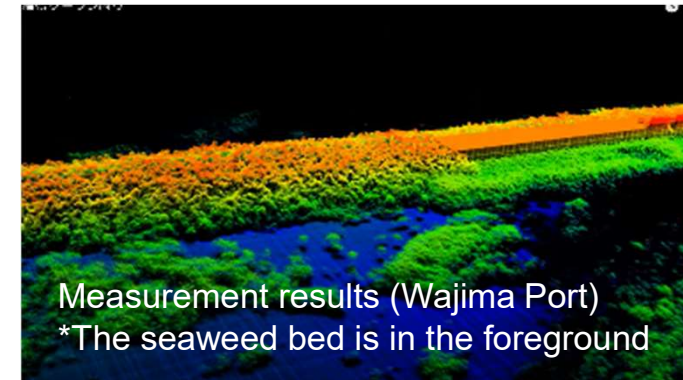
- Development of a drone equipped with a green laser that is highly underwater permeability
- Establishment of highly accurate measurement methods using positioning technology such as quasi-zenith satellites
- Establishment of the system that automatically aggregates acquired data into a database



[Image]  
habitats of seaweed beds in the port (Kochi Port)



[Image]  
blue carbon observation using quasi-zenith satellite





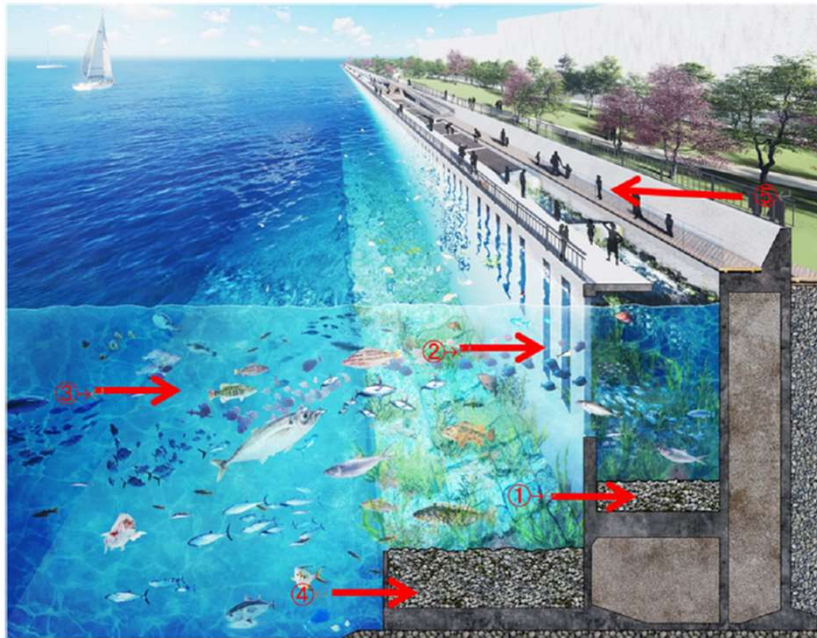
### ③Example of biosymbiotic port structure development (Yokohama Port)

○The biosymbiotic seawall(※) is being constructed at Yokohama Port to recreate the natural rock reefs with seaweed and marine life.

(※) It has slits in the wall to calm waves, allows sunlight to shine through the top, and is paved with natural stone.

○This is expected to allow seaweed to flourish and provide a place for young fish to grow and spawn.

Biosymbiotic seawall (Image)



Construction status



Production

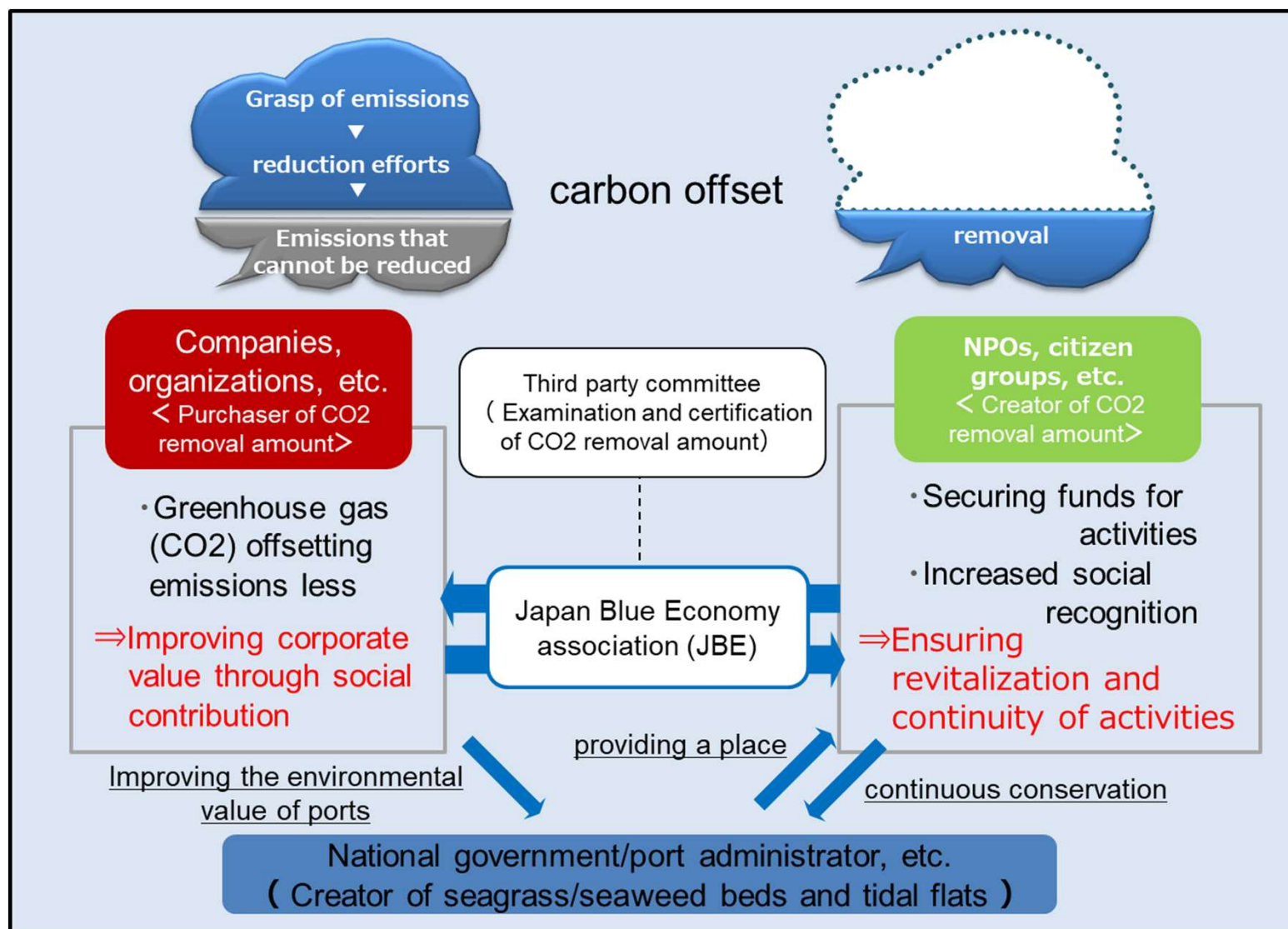


Installation

- ① Installing natural stones inside the seawall to form a rocky seaweed bed
- ② Forming diverse biological habitats through stepped slits
- ③ Raising the seawall mound to avoid oxygen-poor zones
- ④ Installing environmentally friendly blocks
- ⑤ Creating waterfront green space and opening to citizens

# J-Blue Credit

○ Japan Blue Economy Association, which was authorized by MLIT, certifies the CO2 removal amount created by organizations (NPOs, environmental groups, etc.), which conserve seaweed beds etc., and allows credit transactions to expand CO2 removal sources using blue carbon ecosystems toward achieving carbon neutrality in 2050.



# Establishment of Japan Blue Economy Association (JBE)

Blue Economy: Activities aimed at achieving economic growth through the sustainable use of marine resources

## Purpose

- To promote research and development of technologies and methods necessary to revitalize projects that will help conserve and restore coastal areas through close cooperation among researchers, engineers, and practitioners in various fields and capacities.

## Union member at the time of establishment

- (National Research Institute) National Institute of Maritime, Port and Aviation Technology (MPAT)
- (Public interest incorporated foundation) The Sasakawa Peace Foundation (SPF)
- Tomohiro Kuwae

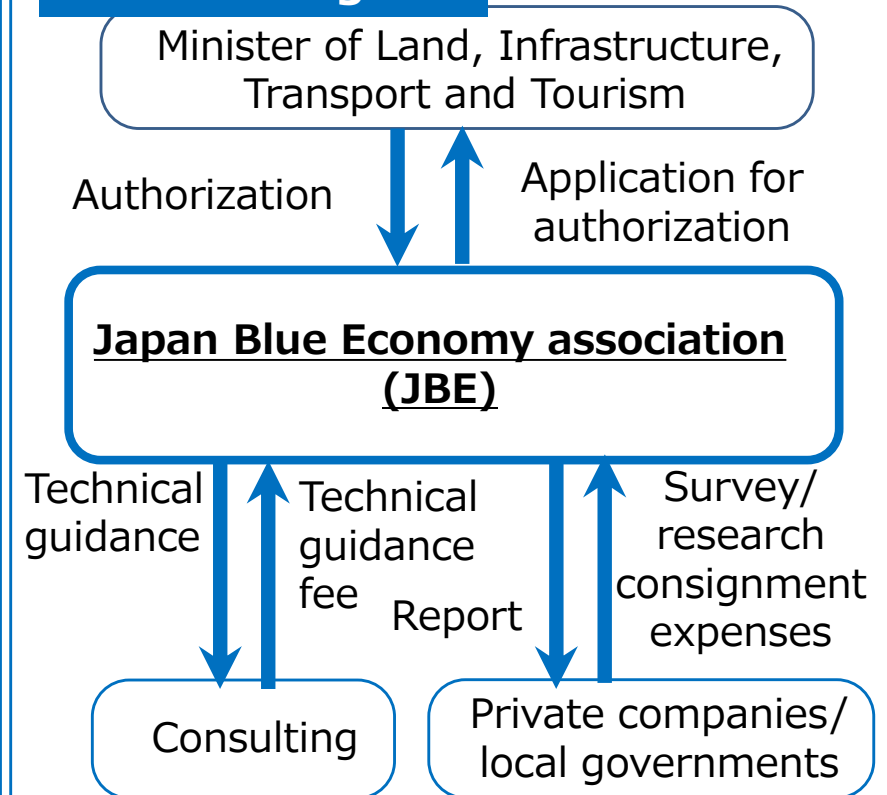
## Board member

Chairman Tomohiro Kuwae : Group Head, Coastal and Estuarine Environment Research Group, MPAT  
Masato Nobutoki : Visiting Professor, Kobe University  
Atsushi Watanabe : Senior Research Fellow, Ocean Policy Research Institute, SPF  
Teruo Yashiro : Certified Public Accountant

## Business summary

- ( 1 ) Quantitative evaluation of blue carbon, etc. in coastal areas
- ( 2 ) Technological development of blue carbon, etc. in coastal areas
- ( 3 ) Building social consensus
- ( 4 ) Introduction of new funding mechanisms

## scheme diagram

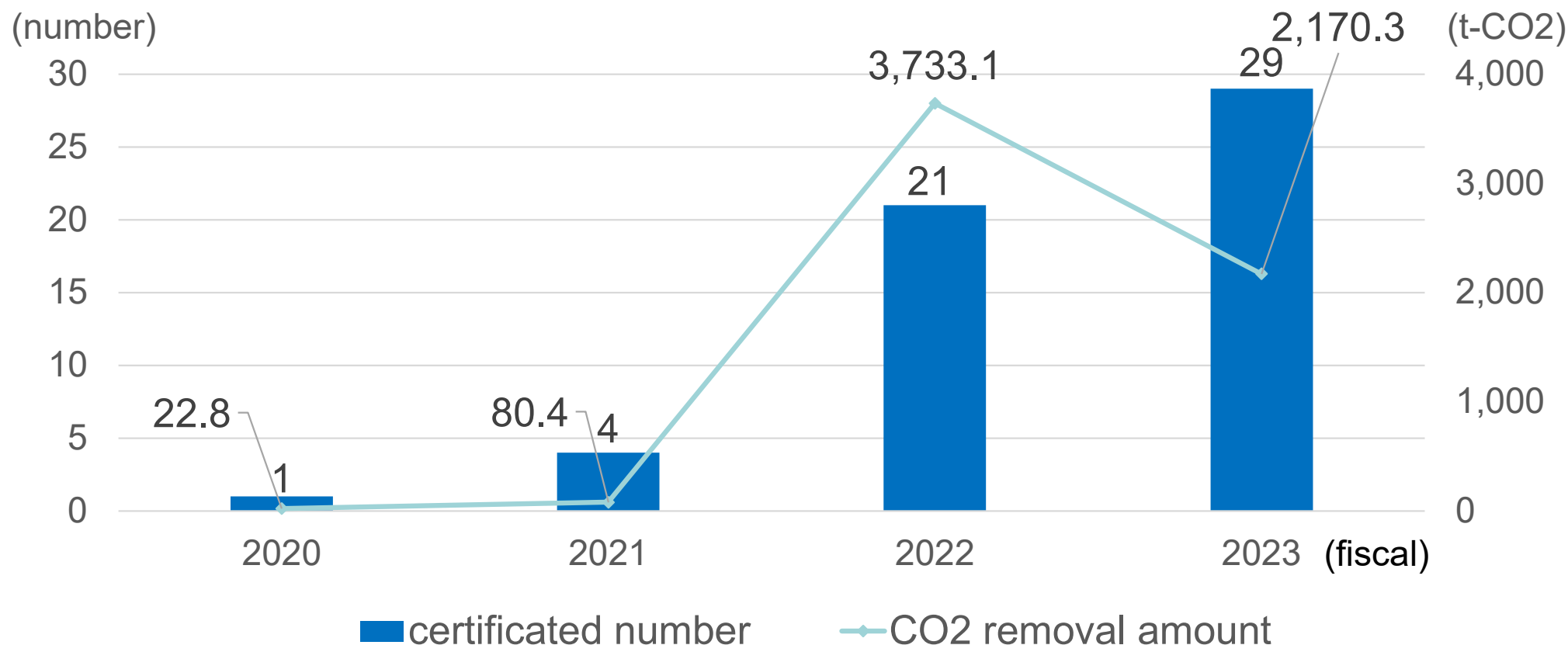


## Establishment approval date

July 14, 2020



# J-Blue Credit achievement



○4<sup>th</sup> call for purchase applicants in fiscal 2023 (As of May 17<sup>th</sup>, 2024)

- Trading amount: 127.3 (t-CO<sub>2</sub>)
- The number of purchasing companies and organizations: 89 (total number including duplicate)
- Average transaction price: 555 (\$/t-CO<sub>2</sub>) (excluding tax) ※1\$=144yen